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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,276	07/08/2003	Frank Olschewski	21295-61	1275

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LEXINGTON, MA 02421

EXAMINER

LAVIN, CHRISTOPHER L

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/604,276

Applicant(s)

OLSCHEWSKI, FRANK

Examiner

Christopher L. Lavin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 12 recites a "software" that imparts the method of claim 1. However, the claim does not require that the program reside on a computer readable medium, or that it is actually on a computer. "Software" per se. is not an apparatus, method, a product or a composition of matter. Rather, a computer program is an intangible thing, and thus non-statutory. This type of information is considered "functional descriptive material" and is non-statutory per se. MPEP 2106(IV)(B)(1)(a)) states (with emphasis added),

"Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim. See paragraph IV.B.2(a), below."

A computer program (or method steps performed by a computer program) IS statutory if it is claimed as being recorded on a "computer readable medium", or a "computer memory". The examiner suggests incorporating the limitations of a "computer readable medium into claim 12 to overcome this rejection. This will be assumed for examination purposes.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 9, 11, and 12 rejected under 35 U.S.C. 102(b) as being anticipated by Elings (5,077,473).

In regards to claim 6, An arrangement for monitoring and controlling a microscope, comprising: a detector unit for acquiring at least one image, at least one input port for a control variable (Figure 2, shows that many ports go into the scanner, 14, those ports include control variables 24, 26, and 22 which control the positioning of the device), a computer system associated with the microscope (Figure 2, item 18), wherein the information content of the at least one image can be ascertained using the detector unit and the computer system (col. 7, lines 10 – 37: The scanning microscope acquires images, which are then analyzed.); the computer system analyzes the information content using a specified target information content and a specified variation of the information content as the tolerance dimension, and determines a control variable therefrom (col. 8, line 54 – col.10, line 65: The system tracks drift motion, using the information obtained from the image, it checks for motion within a particular tolerance level, and warns the user if the motion goes beyond that point.); from the analysis of the information content, using a predetermined target value for influencing the information content (col. 8, line 54 – col.10, line 65: The system attempts to keep the image

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stationary, by sending control signals to the actuators.); and at least one actuator associated with the microscope, wherein the actuator converts the control variable allocated to the actuator into a change in the information content of the image within a tolerance dimension (Figure 2, items 22, 24, and 26).

In regards to claim 7, The arrangement as defined in claim 6, wherein a means for outputting a warning signal is provided, which means makes a warning signal available to the user if the variations in the information content lie outside the tolerance dimension (Col. 10, lines 20 – 65).

In regards to claim 8, The arrangement as defined in claim 6, wherein several actuators are associated with the microscope, each of which receives a different control variable (Figure 2, items 22, 24, and 26).

In regards to claim 9, The arrangement as defined in claim 6, wherein a switch is provided with which a user initiates the automatic monitoring of the microscope (col. 8, lines 4 – 28: The operator initiates the operation by selecting the initial image. A switch could constitute any means the operator uses to indicate he or she is satisfied with the current image.).

In regards to claim 11, The arrangement as defined in claim 6, wherein the microscope is embodied as a scanning microscope (col. 7, line 11).

In regards to claim 1, claim 1 is rejected for the same reasons as claim 7. The argument analogous to that presented above for claim 7 is applicable to claim 1.

In regards to claim 2, claim 2 is rejected for the same reasons as claim 8. The argument analogous to that presented above for claim 8 is applicable to claim 2.

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In regards to claim 3, claim 3 is rejected for the same reasons as claim 9. The argument analogous to that presented above for claim 9 is applicable to claim 3.

In regards to claim 4, claim 4 is rejected for the same reasons as claim 9. The argument analogous to that presented above for claim 9 is applicable to claim 4.

In regards to claim 5, claim 5 is rejected for the same reasons as claim 11. The argument analogous to that presented above for claim 11 is applicable to claim 5.

In regards to claim 12, claim 12 is rejected for the same reasons as claim 1. The argument analogous to that presented above for claim 1 is applicable to claim 12.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elings in view of Tsuneta (6,570,156).

In regards to claim 10, Elings discloses the concept of allowing the user to turn on the feature. Elings also teaches (col. 7, lines 39 – 53) that the system can be implemented in software. It is well known to use GUIs for users to control actions on a computers system. A GUI was probably what Elings is referring to for the user controls specified throughout the patent, but as Elings does not explicitly state this a secondary teaching has been provided. Tsuneta teaches (Figure 2) that a GUI can be used to control a microscope and alert the user to problems.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use a GUI for user interaction in Elings as taught by Tsuneta. A GUI would allow for easy to understand controls that could also communicate errors to the user. GUIs are familiar interfaces for most computer users and would require very little training in the actual use of the interface.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
8. US Pat. 5,257,182 discloses the concept of autocorrecting focus and light in a microscope.
9. US Pat. 6,801,650 discloses drift correction in a microscope
10. US Pat. 3,971,936 discloses using convolution between images of a microscope to detect drift.
11. US Pat. 7,034,296 disclose a microscope that provides alarms when variables go beyond a threshold.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher L. Lavin whose telephone number is 571-272-7392. The examiner can normally be reached on M - F (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh M. Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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